

32692  
Customer Number

Patent  
Case No.: 59368US010

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

First Named Inventor: RADMER, MATTHEW R.  
Application No.: 10/596117 Confirmation No.: 2301  
Filed: December 3, 2004  
Title: SULFONE SUBSTITUTED IMIDAZO RING ETHERS

---

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop: Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

Copies of any cited foreign patents, foreign publications, non-patent literature documents, and any pending U.S. applications filed before June 30, 2003, are enclosed. Copies of any pending U.S. applications filed after June 30, 2003 that can be accessed on the USPTO's IFW system are not enclosed as per USPTO Waiver dated September 21, 2004. Copies of any U.S. patents and published U.S. patent applications are not enclosed.

If a first Office Action on the merits has been mailed prior to the mailing date of this document, please charge the fee for consideration of an Information Disclosure Statement set forth in 37 CFR § 1.17(p).

Respectfully submitted,

18 SEPTEMBER 2006  
Date

By: Dean A. Ersfeld  
Dean A. Ersfeld, Reg. No.: 46,689  
Telephone No.: 651-733-7830

Office of Intellectual Property Counsel  
3M Innovative Properties Company  
Facsimile No.: 651-736-3833

<b>Substitute for form 1449A/PTO (modified)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)  Page 1 of 6	<b>Application Number</b>	10/596117
	<b>Filing Date</b>	December 2, 2004
	<b>First Named Inventor</b>	Radmer, Matthew R.
	<b>Confirmation Number</b>	2301
	<b>Attorney Case Number</b>	59368US010

U.S. Patent Documents					
Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
	A1	US- 3,314,941	04-18-1967	Littell et al.	
	A2	US- 4,689,338	08-25-1987	John F. Gerster	
	A3	US- 4,698,348	10-06-1987	John F. Gerster	
	A4	US- 4,929,624	05-29-1990	Gerster et al.	
	A5	US- 4,988,815	01-29-1991	Andre et al.	
	A6	US- 5,037,986	08-06-1991	John F. Gerster	
	A7	US- 5,175,296	12-29-1992	Gerster	
	A8	US- 5,238,944	08-24-1993	Wick et al.	
	A9	US- 5,266,575	11-30-1993	John F. Gerster	
	A10	US- 5,268,376	12-07-1993	John F. Gerster	
	A11	US- 5,346,905	09-13-1994	John F. Gerster	
	A12	US- 5,352,784	10-04-1994	Nikolaides et al.	
	A13	US- 5,367,076	11-22-1994	Gerster	
	A14	US- 5,389,640	02-14-1995	Gerster et al.	
	A15	US- 5,395,937	03-07-1995	Nikolaides et al.	
	A16	US- 5,446,153	08-29-1995	Lindstrom et al.	
	A17	US- 5,482,936	01-09-1996	Kyle J. Lindstrom	
	A18	US- 5,693,811	12-02-1997	Lindstrom	
	A19	US- 5,741,908	04-21-1998	Gerster et al.	
	A20	US- 5,756,747	05-26-1998	Gerster et al.	
	A21	US- 5,939,090	08-17-1999	Beaurline et al.	
	A22	US- 6,039,969	03-21-2000	Tomai et al.	
	A23	US- 6,069,149	05-30-2000	Nanba et al.	
	A24	US- 6,083,505	07-04-2000	Miller et al.	
	A25	US- 6,110,929	08-29-2000	Gerster et al.	
	A26	US- 6,194,425	02-27-2001	Gerster et al.	
	A27	US- 6,245,776	06-12-2001	Skwierczynski et al.	
	A28	US- 6,331,539	12-18-2001	Crooks et al.	

<b>*Examiner:</b>	<b>Date Considered:</b>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>Substitute for form 1449A/PTO (modified)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)  Page 2 of 6	<b>Application Number</b>	<b>10/596117</b>
	<b>Filing Date</b>	<b>December 2, 2004</b>
	<b>First Named Inventor</b>	<b>Radmer, Matthew R.</b>
	<b>Confirmation Number</b>	<b>2301</b>
	<b>Attorney Case Number</b>	<b>59368US010</b>

U.S. Patent Documents					
Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
	A29	US- 6,376,669	04-23-2002	Rice et al.	
	A30	US- 6,451,810	09-17-2002	Coleman et al.	
	A31	US- 6,518,265	02-11-2003	Kato et al.	
	A32	US- 6,525,064	02-25-2003	Dellaria et al.	
	A33	US- 6,541,485	04-01-2003	Crooks et al.	
	A34	US- 6,545,016	04-08-2003	Dellaria et al.	
	A35	US- 6,545,017	04-08-2003	Dellaria et al.	
	A36	US- 6,558,951	05-06-2003	Tomai et al.	
	A37	US- 6,573,273	06-03-2003	Crooks et al.	
	A38	US- 6,656,938	12-02-2003	Crooks et al.	
	A39	US- 6,660,735	12-09-2003	Crooks et al.	
	A40	US- 6,660,747	12-09-2003	Crooks et al.	
	A41	US- 6,664,260	12-16-2003	Charles et al.	
	A42	US- 6,664,264	12-16-2003	Dellaria et al.	
	A43	US- 6,664,265	12-16-2003	Crooks et al.	
	A44	US- 6,667,312	12-23-2003	Bonk et al.	
	A45	US- 6,670,372	12-30-2003	Charles et al.	
	A46	US- 6,677,347	01-13-2004	Crooks et al.	
	A47	US- 6,677,348	01-13-2004	Heppner et al.	
	A48	US- 6,677,349	01-13-2004	Griesgraber	
	A49	US- 6,683,088	01-27-2004	Crooks et al.	
	A50	US- 6,696,465	02-24-2004	Dellaria et al.	
	A51	US- 6,706,728	03-16-2004	Hedenstrom, et al.	
	A52	US- 6,743,920	06-01-2004	Lindstrom, et al.	
	A53	US- 6,756,382	06-29-2004	Coleman, et al.	
	A54	US- 6,797,718	09-28-2004	Dellaria, et al.	
	A55	US- 6,818,650	11-16-2004	Griesgraber	
	A56	US- 6,841,678	01-11-2005	Merli et al.	

<b>*Examiner:</b>	<b>Date Considered:</b>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>Substitute for form 1449A/PTO (modified)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)  Page 3 of 6	<b>Application Number</b>	<b>10/596117</b>
	<b>Filing Date</b>	<b>December 2, 2004</b>
	<b>First Named Inventor</b>	<b>Radmer, Matthew R.</b>
	<b>Confirmation Number</b>	<b>2301</b>
	<b>Attorney Case Number</b>	<b>59368US010</b>

U.S. Patent Documents					
Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
	A57	US- 6,852,861	02-08-2005	Merli et al.	
	A58	US- 2002/0016332 A1	02-07-2002	Slade	
	A59	US- 2002/0055517 A1	05-09-2002	Smith	
	A60	US- 2002/0058674 A1	05-16-2002	Hedenstrom et al.	
	A61	US- 2002/0107262	08-08-2002	Lindstrom	
	A62	US- 2002/0110840 A1	08-15-2002	Tomai et al.	
	A63	US- 2003/0096835	05-22-2003	Crooks et al.	
	A64	US- 2003/0130299 A1	07-10-2003	Crooks et al.	
	A65	US- 2003/0133913 A1	07-17-2003	Tomai et al.	
	A66	US- 2003/0139364 A1	07-24-2003	Krieg et al.	
	A67	US- 2003/0144286	07-31-2003	Frenkel et al.	
	A68	US- 2003/0161797 A1	08-28-2003	Miller et al.	
	A69	US- 2003/0199538 A1	10-23-2003	Skwierczynski et al.	
	A70	US- 2004/0014779	01-22-2004	Gorden et al.	
	A71	US- 2004/0091491	05-13-2004	Kedl et al.	
	A72	US- 2004/0132079	07-08-2004	Gupta et al.	
	A73	US- 2004/0141950	07-22-2004	Noelle et al.	
	A74	US- 2004/0147543	07-29-2004	Hays et al.	
	A75	US- 2004/0162309	08-19-2004	Gorden et al.	
	A76	US- 2004/0171086	09-02-2004	Fink et al.	
	A77	US- 2004/0175336	09-09-2004	Egging et al.	
	A78	US- 2004/0176367	09-09-2004	Griesgraber et al.	
	A79	US- 2004/0180919	09-16-2004	Lee et al.	
	A80	US- 2004/0181130	09-16-2004	Fox et al.	
	A81	US- 2004/0181211	09-16-2004	Elliott et al.	
	A82	US- 2004/0191833	09-30-2004	Fink et al.	
	A83	US- 2004/0192585	09-30-2004	Fox et al.	
	A84	US- 2004/0197865	10-07-2004	Gupta et al.	

<b>*Examiner:</b>	<b>Date Considered:</b>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>Substitute for form 1449A/PTO (modified)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)  Page 4 of 6	<b>Application Number</b>	<b>10/596117</b>
	<b>Filing Date</b>	<b>December 2, 2004</b>
	<b>First Named Inventor</b>	<b>Radmer, Matthew R.</b>
	<b>Confirmation Number</b>	<b>2301</b>
	<b>Attorney Case Number</b>	<b>59368US010</b>

U.S. Patent Documents					
Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
	A85	US- 2004/0202720	10-14-2004	Wightman et al.	
	A86	US- 2004/0214851	10-28-2004	Birmachu et al.	
	A87	US- 2005/0054590	03-10-2005	Averett	
	A88	US- 2005/0085500	04-21-2005	Gutman et al.	
	A89	US- 2005/0165236	07-28-2005	Colombo et al.	
	A90	US- 2005/245562	11-03-2005	Garcia-Echeverria et al.	

Foreign Patent Documents							
Exam. Init.*	Cite No.	Foreign Patent Document--		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation (Check if yes)
		Ctry Code	Number-KindCode (if known)				
	B1	PCT	WO 02/36592	05-10-2002			X
	B2	PCT	WO 05/018551	03-03-2005			
	B3	PCT	WO 05/018555	03-03-2005			
	B4	PCT	WO 05/018556	03-03-2005			
	B5	PCT	WO 05/020999	03-10-2005			
	B6	PCT	WO 05/032484	04-14-2005			
	B7	PCT	WO 05/048933	06-02-2005			
	B8	PCT	WO 05/048945	06-02-2005			
	B9	PCT	WO 05/051317	06-09-2005			
	B10	PCT	WO 05/051324	06-09-2005			
	B11	PCT	WO 05/054237	06-16-2005			
	B12	PCT	WO 05/054238	06-16-2005			
	B13	PCT	WO 05/066169	07-21-2005			
	B14	PCT	WO 05/066170	07-21-2005			
	B15	PCT	WO 05/066172	07-21-2005			
	B16	PCT	WO 05/076783	08-25-2005			
	B17	PCT	WO 05/079195	09-01-2005			
	B18	PCT	WO 05/094531	10-13-2005			
	B19	PCT	WO 05/123079	12-29-2005			

<b>*Examiner:</b>	<b>Date Considered:</b>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>Substitute for form 1449A/PTO (modified)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)  Page 5 of 6	<b>Application Number</b>	<b>10/596117</b>
	<b>Filing Date</b>	<b>December 2, 2004</b>
	<b>First Named Inventor</b>	<b>Radmer, Matthew R.</b>
	<b>Confirmation Number</b>	<b>2301</b>
	<b>Attorney Case Number</b>	<b>59368US010</b>

Foreign Patent Documents							
Exam. Init.*	Cite No.	Foreign Patent Document--		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation (Check if yes)
		Ctry. Code	Number-KindCode (if known)				
	B20	PCT	WO 05/123080	12-29-2005			
	B21	PCT	WO 06/004737	08-17-2006			
	B22	PCT	WO 06/009832	01-26-2006			
	B23	PCT	WO 06/009826	01-26-2006			
	B24	PCT	WO 06/026760	03-09-2006			
	B25	PCT	WO 06/028451	03-16-2006			
	B26	PCT	WO 06/028545	03-16-2006			
	B27	PCT	WO 06/028962	03-16-2006			
	B28	PCT	WO 06/029115	03-16-2006			
	B29	PCT	WO 06/031878	03-23-2006			
	B30	PCT	WO 06/038923	04-13-2006			
	B31	PCT	WO 06/065280	06-22-2006			
	B32	PCT	WO 06/074003	07-13-2006			
	B33	PCT	WO 06/083400	08-16-2006			
	B34	PCT	WO 06/083440	08-10-2006			
	B35	PCT	WO 06/086449	08-17-2006			
	B36	PCT	WO 06/086633	08-17-2006			
	B37	PCT	WO 06/091568	08-31-2006			
	B38	PCT	WO 06/091567	08-31-2006			
	B39	PCT	WO 06/091647	08-31-2006			
	B40	JP	9-208584	08-12-1997			
	B41	JP	11-080156 A	03-26-1999			X
	B42	JP	11-222432	08-17-1999			X
	B43	JP	2000-247884 (abs)	09-12-2000			X
	B44	EP	0 394 026	10-24-1990			
	B45	EP	1 104 764	06-06-2001			

<b>*Examiner:</b>	<b>Date Considered:</b>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>Substitute for form 1449A/PTO (modified)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)  Page 6 of 6	<b>Application Number</b>	<b>10/596117</b>
	<b>Filing Date</b>	<b>December 2, 2004</b>
	<b>First Named Inventor</b>	<b>Radmer, Matthew R.</b>
	<b>Confirmation Number</b>	<b>2301</b>
	<b>Attorney Case Number</b>	<b>59368US010</b>

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS		
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C1	Wozniak et al., "The Amination of 3-nitro-1, 5-naphthyridines by Liquid Ammonia/Potassium Permanganate <sup>1,2</sup> . A New and Convenient Amination Method.", <u>Journal of the Royal Netherlands Chemical Society</u> , 102, pp 511-513, December 12, 1983.
	C2	Brennan et al., "Automated Bioassay of Interferons in Micro-test Plates.", <u>Biotechniques</u> , June/July, 78, 1983.
	C3	Testerman et al., "Cytokine Induction by the Immunomodulators Imiquimod and S-27609.", <u>Journal of Leukocyte Biology</u> , Volume 58, pp. 365-372, September 1995.
	C4	Bachman et al., "Synthesis of Substituted Quinolylamines. Derivatives of 4-Amino-7-Chloroquinoline.", <u>J. Org. Chem.</u> , 15, pp 1278-1284 (1950).
	C5	Jain et al., "Chemical and Pharmacological Investigations of Some $\omega$ -Substituted Alkylamino-3-aminopyridines.", <u>J. Med. Chem.</u> , 11, pp 87-92 (1968).
	C6	Baranov et al., "Pyrazoles, Imidazoles, and Other 5-Membered Rings.", <u>Chem. Abs.</u> 85, 94362, (1976).
	C7	Berényi et al., "Ring Transformation of Condensed Dihydro-as-triazines.", <u>J. Heterocyclic Chem.</u> , 18, pp 1537-1540 (1981).
	C8	Chollet et al., "Development of a Topically Active Imiquimod Formulation.", <u>Pharmaceutical Development and Technology</u> , 4(1), pp 35-43 (1999).
	C9	Izumi et al., "1H-Imidazo[4,5-c]quinoline Derivatives as Novel Potent TNF- $\alpha$ Suppressors: Synthesis and Structure-Activity Relationship of 1-, 2- and 4-Substituted 1H-imidazo[4,5-c]pyridines.", <u>Bioorganic &amp; Medicinal Chemistry</u> , 11, pp 2541-2550 (2003).

<b>*Examiner:</b>	<b>Date Considered:</b>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	